

# TDD Practice 2

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# Review: Resig's Template

```
var Person = Class.extend({
  init: function(isDancing){
    this.dancing = isDancing;
  },
  dance: function(){
    return this.dancing;
  }
});

var Ninja = Person.extend({
  init: function(){
    this._super( false );
  },
  dance: function(){
    // Call the inherited version of dance()
    return this._super();
  },
  swingSword: function(){
    return true;
  }
});

var p = new Person(true);
p.dance(); // => true

var n = new Ninja();
n.dance(); // => false
n.swingSword(); // => true
```

This is similar to the style used in Cocos2d-JS.

<http://ejohn.org/blog/simple-javascript-inheritance/>

# Mocha.js

- Recall our previous TDD practice with Mocha.

```
describe( 'Player', function() {  
  it( 'can be created with initial level', function() {  
    var player = new Player( 10 );  
    assert.notEqual( player, null );  
  });  
});
```

# Mocha + Chai

```
describe( 'Player', function() {  
    beforeEach( function() {  
        this.player = new Player();  
    });  
  
    it( 'should have healthPoint', function() {  
        assert( this.player.healthPoint != undefined );  
    });  
  
    it( 'should be able to set health point', function() {  
        this.player.setHealthPoint( 67 );  
        assert( this.player.healthPoint == 67 );  
    });  
});
```

# Practice 1: TennisGame

- Write class **TennisGame** with the following methods
  - getStatus() - returns a string representing the current score in the format: a:X-b:Y with \* on player with the ball and "A" as advantage  
for example
    - a\*:0-b:0                      a\*:0-b:15                      a:40-b\*:30
    - a\*:40A-b:40                      a:W-b:L      (game ends)
  - aScore(), bScore()
  - getAScore(), getBScore() (ignore advantage in these methods)
  - ballOwner() - returns "a" or "b"
  - Initially, a has the ball.
- Reference: <http://www.codingdojo.org/cgi-bin/index.pl?KataTennis>

# Before you start!

- Think about the “steps” you need to take to complete the class

# Practice 2: Bowling

- See <http://www.codingdojo.org/cgi-bin/index.pl?KataBowling>
- Write a class BowlingGame
  - play( res )
    - res can be '-', '1', ..., '9', 'X' and '/'
  - currentScore()
    - returns the score